

Work Order ID 64904

Wednesday, December 22, 2010 1:40:53 PM

Page 1

Item ID: D4034-041

Accept

Revision ID:

Item Name: Aft Upper Rib Assembly

Start Date: 12/22/2010 Start Qty: 3.00

Required Date: 12/30/2010 Req'd Qty: 3.00

Reference:

Approvals:

Process Plan:

Date: 1012-22

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4034

A

100

Weld per dwg A/R S.S. rod Batch: 11/16/11 0.00



Large Fab

Memo

0.00

Large Fab

1- Assemble ribs to hoop and weld as per dwg DT9564

2- Weld bushing in rib and grind weld flush as per dwg

[Signature]
11/01/12 (3x)

Pro 2

110

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

PC 11.01.13

[Signature] 11/01/12 (3x)

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

11/01/13

(x3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4034-041 PAR #: _____ Fault Category: Large Fob NCR: Yes No DQA: 1 Date: 11/01/12
 Resolution: rework Disposition: rework QA: N/C Closed: 1 Date: 11/01/13

NCR: <u>64904</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>11/01/12</u>	<u>#100</u>	<u>Qty x1 Bushin D4021-9 scrap</u> <u>Drill bit broke when Back Drillin</u> <u>out weld.</u> <u>R.C Process</u>	<u>[Signature]</u>	<u>Scr Drill out + Remove</u> <u>D4021-9 Qty x1</u>	<u>[Signature]</u> <u>11/01/12</u>	<u>S</u> <u>11/01/13</u>	<u>[Signature]</u>	<u>S</u> <u>11/01/12</u>
		<u>Scrap item was:</u> <u>1x D4021-9</u> <u>B#: <u>360803</u></u>	<u>[Signature]</u>	<u>Re weld D4021-9 B# <u>63854</u></u> <u>As per 025204</u>				

NOTE: Date & initial all entries

Work Order ID 64904

Wednesday, December 22, 2010 1:40:53 PM



Page 2

Item ID:	D4034-041	Accept		Setup	Start	
Revision ID:						
Item Name:	Aft Upper Rib Assembly				Stop	
Start Date:	12/22/2010	Start Qty: 3.00				
Required Date:	12/30/2010	Req'd Qty: 3.00				
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <i>WA</i>	0.00							
	<i>Basket cell</i>	0.00							
Packaging	Memo								
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
		0.00							
QC	Memo								
Quality Control									

11/01/12 *(3x)*

11/01/13

CHF

11-01-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, December 22, 2010 1:40:57 PM

Page 1

Work Order ID: 64904

Parent Item: D4034-041

Parent Item Name: Aft Upper Rib Assembly

Start Date: 12/22/2010





Required Date: 12/30/2010

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP RevA: new issue DD 09.11.23 verified by:EC
per dwg revA 10.03.15 verified by:EC

IPP Rev:B as

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4034-1  Rib		Manufactured	No			100	Each	6.0000	1	3			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				6					
					64169			6					
D4034-3  Rib		Manufactured	No			100	Each	3.0000	1	3			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				3					
					64168			3					
D4021-7  Hoop		Manufactured	No			100	Each	6.0000	1	3			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				6					
					58039			1					
					64260			5					
D4021-9  Bushing		Manufactured	No			100	Each	20.0000	2	6			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				20					
					56094			2					
					60803			2					
					63854			16					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

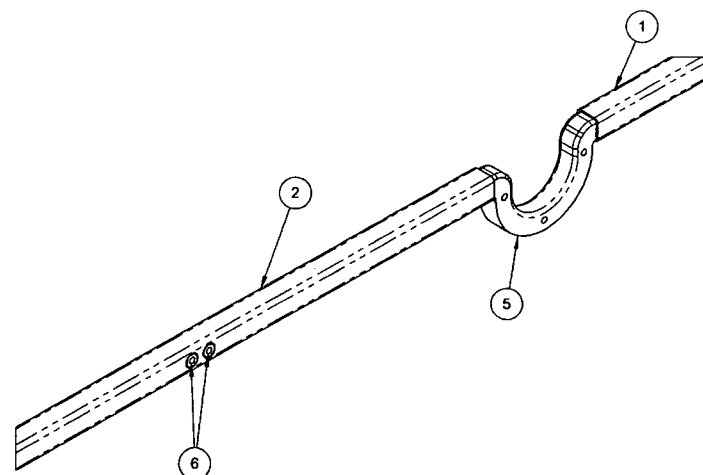
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

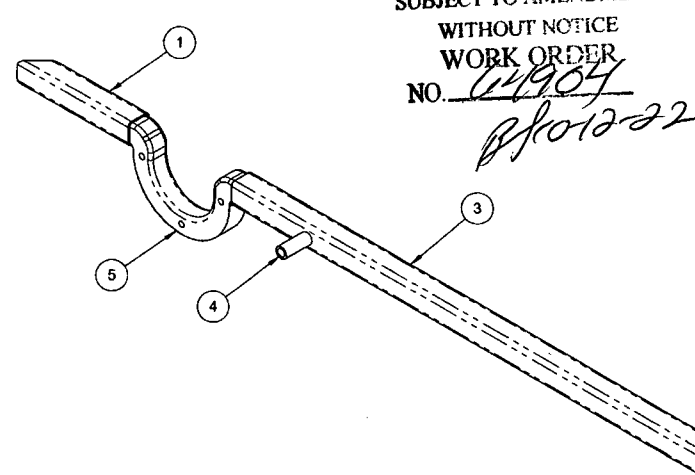
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
	X		D4034-041	AFT UPPER RIB ASSY
		X	D4034-043	FWD UPPER RIB ASSY
1	1	1	D4034-1	RIB
2	1		D4034-3	RIB
3		1	D4034-5	RIB
4		1	D2327-3	SPACER BUSHING
5	1	1	D4021-7	HOOP
6	2		D4021-9	BUSHING



D4034-041 AFT UPPER RIB ASSY



D4034-043 FWD UPPER RIB ASSY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 04904
04012-22

RELEASED
2010-03-12
MP

A	NEW ISSUE	AJS	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4034	SHEET 1 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	UPPER RIB ASSY, BASKET BASE	NTS
DATE	10.03.04	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

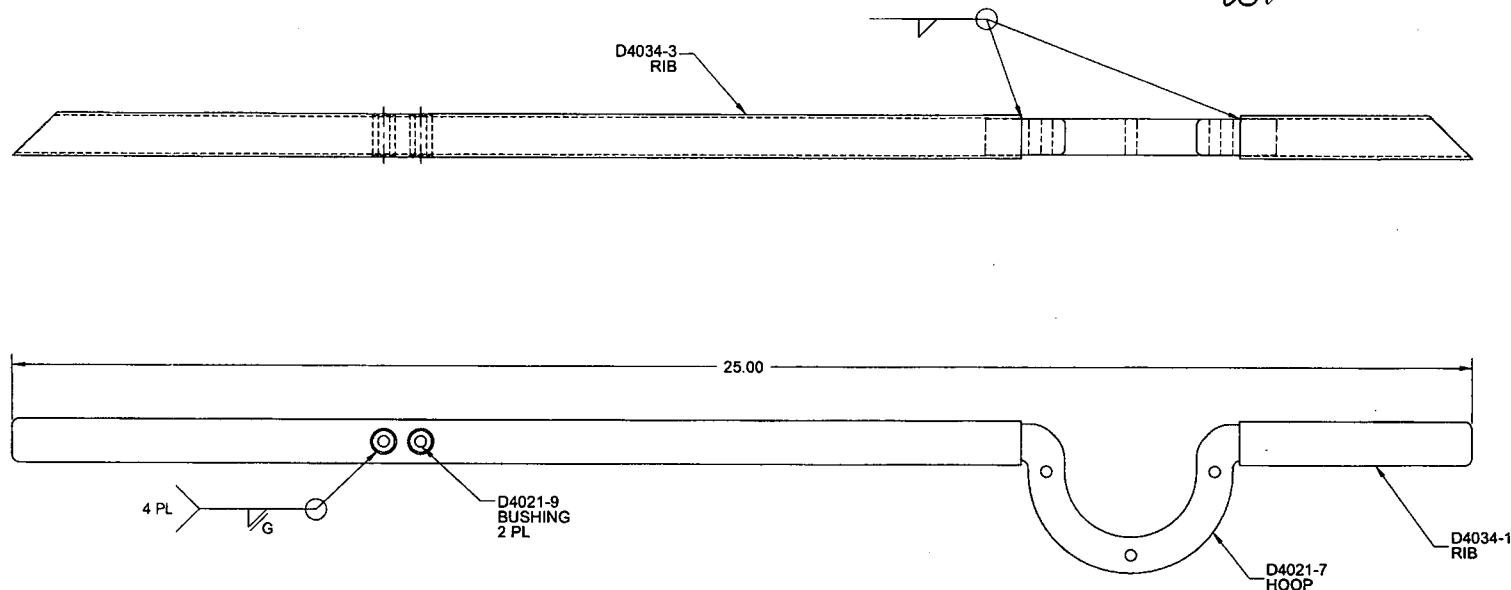
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

WLO-44904



D4034-041 AFT UPPER RIB ASSY

RELEASED
2010-03-12
MMO

- NOTES:**
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: N/A
 7) WEIGHT: 1.59 lbs
 8) WELD PER DART QSI 004

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4034	SHEET 2 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	UPPER RIB ASSY, BASKET BASE	NTS
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

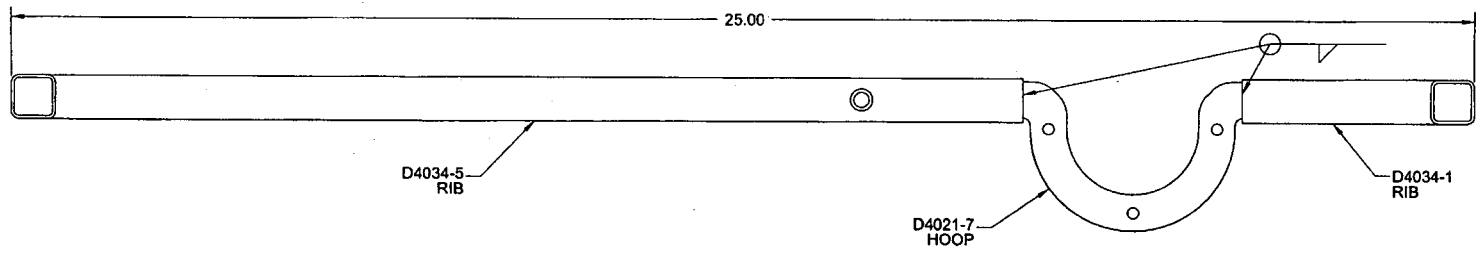
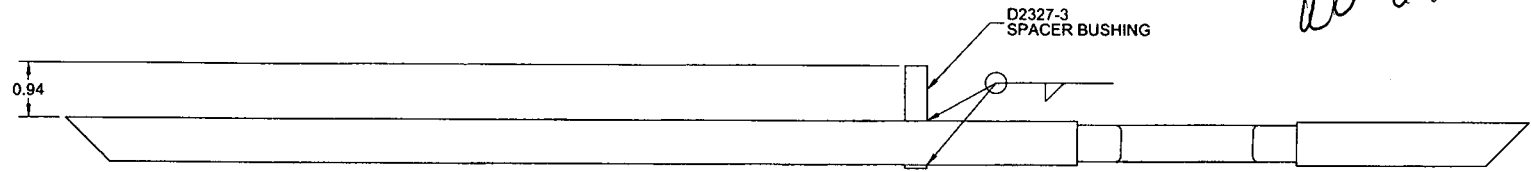
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

WB 64904



D4034-043 FWD UPPER RIB ASSY

RELEASED
2010-03-12
AND

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 1.58 lbs
 - 8) WELD PER DART QSI 004

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4034	SHEET 3 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	UPPER RIB ASSY, BASKET BASE	NTS
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

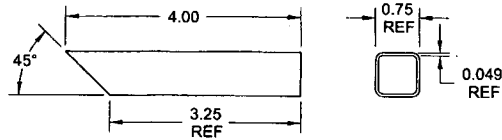
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

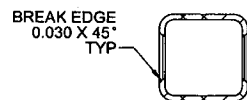
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

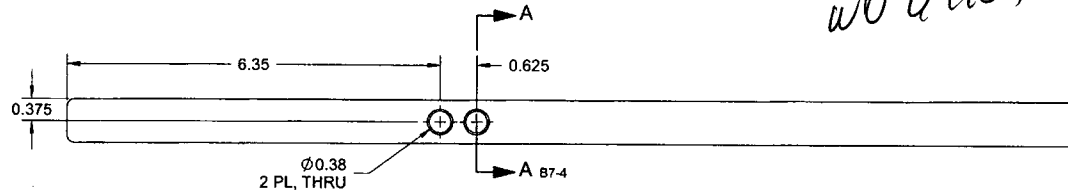
wb 44909



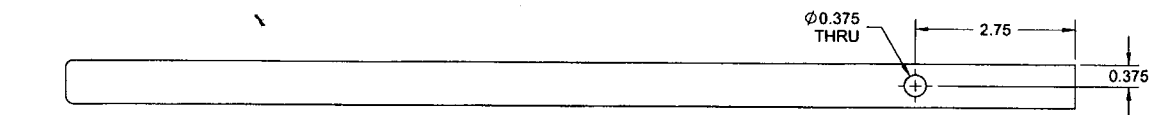
D4034-1 RIB



SECTION A-A D4-4



D4034-3 RIB



D4034-5 RIB

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
REF DART SPEC. M304TS0.750W.049
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT -1: 0.13 lbs
-3 & -5: 0.62 lbs

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4034	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	UPPER RIB ASSY, BASKET BASE	NTS
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RELEASED
2010-03-12
ANT

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ENGINEERING CHANGE NOTICE **DART AEROSPACE LTD**

MPP

Date: 11.01.19	Job No.:	ADR Yes/No: No	ADR Date:	ECN #: 11- 505
Product No.: D407-797		Created By: SC	Approved By: <i>[Signature]</i>	
Product Name: HELI-UTILITY BASKET		Checked By: <i>[Signature]</i>	General Manager Approval:	

Distribution	Reqd	Resp	Initial / Date
Production Manager / Coord.	Y	LL	
Purchasing Coord.	N		
Production Engineering Coord.	Y	DD	

Distribution	Reqd	Resp	Initial / Date
DQA / QA Coord.	N		
QC Coordinator	Y	JW/ED	
Customer Technical Support	Y	MB	
Marketing	N		
Customer Order Processing	N		

Reason for Change:
Release updated drawings

Documents Affected:
D4034 Rev.B, D4151 Rev.C, D4272 Rev.C, D4273 Rev.C, D4277 Rev.C
D4278 Rev.C, D4279 Rev.B, D4306 Rev.B, D4307 Rev.A

PARTS MUST COMPLY ☒ **PREVIOUS PARTS SATISFACTORY** ☐

#	Quality Assurance Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Eurocopter France	N			
3					

#	Engineering Actions	Reqd	Resp	Notes	Complete
4	Required Documents/Drawings Under Review	N			
5	Update Master Document List (MDL)	N			
6	Update Product Compatability Matrix	N			
7	Create Eurocopter Form (FEE)	N			
8	Notify TC / FAA of Change	N			
9					

#	Document Control Actions	Reqd	Resp	Notes	Complete
10	Move Electronic Files	Y	KJ		
11	Update Blue/Pink/DSI Folder and Electronic Files	N			
12	Update Approved/Preliminary PDF Files	Y	KJ		11.01.19 <i>[Signature]</i>
13	Update Document Record (DR)	N			
14	Update Product Development Summary	N			
15	Update QSI 021 and/or STC Approval List	N			
16	Update Parts / STC Database	Y	KJ		11.01.19 <i>[Signature]</i>
17	Update / Verify ARC Database	N			
18	Create / Update Change Record Form / Item Card Database	N			
19	Create / Update PPP's	N			
20	Update Document Control Database / Laminated Dwgs	N			
21	Update Grey Project / Electronic Binder PDF Files	N			
22	Update D-Part/M-Drawing/DSI/DEO Master Binders	Y	KJ		11.01.19 <i>[Signature]</i>
23					
24					

Description / Action:

- Rework D4034-3 Rib per Rev.B ✓
- Scrap D4151-041/-043 Rev.B parts in stock ✓
- D4277-3/-5/-7/-9/-11 Rev.B parts in stock are good; Rework D4277-1 per Rev.C
- D4278-045 Rev.B part in stock are good, Rework D4278-041/-047 per Rev.C
- D4306-1 Rev.A part in stock is good

D4034-041 x 2 s/h - 65789 (4904) + 3 wip

ECN Verified & Complete: _____ Date: _____

SCU 11-505

Evolve

D4034-3 to Rev. B x3 (65665)
D4277-1 to Rev. C 8 (65312)
D4278-041 to Rev. C 6
D4278-042 to Rev. C 8

Scop

D4151-041 Rev. B 2 ~~2410 60885 111?~~
(65664) D4151-043 Rev. B 2
(60888)



L Lacelle

From: David Shepherd [dshepherd@dartaero.com]
Sent: January 17, 2011 6:07 PM
To: 'Sian Willems'
Cc: 'Mike Petsche'; llacelle@dartaero.com; 'Peggy McDonald'; 'Bill Beckett'; 'Sridhar Chintapalli'
Subject: RE: delivery VIH basket

Sian,

Talked to Pat while he was in the line-up at Walmart.
 He has had to pull his 407 aircraft off the heli-skiing contract because of bearing problems.
 Hopefully, he wasn't buying new bearings at Walmart???

Needless to say, he is not in a rush for the 407 basket.
 He is hoping to put back on contract for mid February.
 Therefore, if we deliver to him for Feb. 11th, he is good with that.

Mike,

I will send back the drawings I have signed today so that you guys can get going on the approved parts.
 If you get me the rest for Friday, I will try to sign on the weekend.

David

From: Sian Willems [mailto:swillems@dartaero.com]
Sent: Monday, January 17, 2011 8:32 AM
To: David Shepherd
Cc: Mike Petsche; llacelle@dartaero.com; Peggy McDonald
Subject: delivery VIH basket

Hi David,

Are you aware of any specific date that VIH is requiring their 407 basket by? We have an end of Jan date in the system, which will be very difficult for Linda since she's missing dwg's. So I'm trying to determine if the date on the order was set by Dart or VIH, if it's set by Dart, then we should move it back a little to give production time to make. If you're not sure, then I'm going to give Pat Renaud a call to confirm required delivery.

Thanks,

Sian Willems

Marketing
 T: 1-613-632-5200 ext 239
 F: 1-613-632-5246
 C: 1-613-676-0577
swillems@dartaero.com
DART Aerospace Ltd.

1/18/11